

DOCKET NO. 123857-00002 (SAND06-07196)
SERIAL NO. 10/695,304
PATENT

REMARKS

Claims 1-22 are pending in the application. Claims 1, 2, 4, 5, 7-10, 15-17 and 20 have been amended. Reconsideration is respectfully requested.

Claims 1-22 stand rejected under 35 U.S.C. §112 second paragraph for indefiniteness. These rejections are traversed, but in order to expedite prosecution, they are overcome by the foregoing amendments.

Claims 1-7, 9, and 15-18 stand rejected under 35 U.S. C. 102(b) as being anticipated by Frankot ('397) or Bickel et al ('972) or Frankot et al ('693) or Gabriel et al ('704) or Corrubia et al ('119) or Brown ('171) or Brown ('424) or Auterman ('708) or Madsen et al ('318). These rejections are overcome for the exemplary reasons given below.

Claims 1-22 recite that an antenna baseline length between a first flight pass of an antenna pair and a second flight pass of an antenna pair is estimated by applying geometric analysis to first and second geometric relationships between a reference point and the respective first and second flight passes. The first geometric relationship is specified by first information determined from the first flight pass, and the second geometric relationship is specified by second information determined from the second flight pass. The position or height of a target is estimated based on the antenna baseline length estimate and one of the first and second geometric relationships. Thus, a geometric relationship that was geometrically analyzed to produce the antenna baseline length estimate is also re-used together with that antenna baseline length estimate to estimate the target

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position/height. This exemplary feature of Claims 1-22 has not been found to be taught or suggested in any of the aforementioned applied references.

In particular, Frankot '397 appears to be the only one of the aforementioned references that even addresses the problem of determining a baseline length between respective flight passes of antenna pairs. At line 24-42 of Col. 5 and lines 26-56 of Col. 6, Frankot '397 appears to disclose that a baseline separation indicated by GPS data can be refined based on processing complex SAR images determined from various flight passes. The processing of these complex images includes calculating phase derivatives of the complex images, and performing linear regressions between various ones of the phase derivative images. This processing of complex SAR images is clearly not geometric analysis of geometric relationships between flight passes and a reference point. As to the GPS data itself, even if this data is (hypothetically for purposes of explication) assumed to involve geometric analysis of geometric relationships of the flight passes, Frankot '397 appears to use such GPS data only to determine the antenna baseline length, and does not appear to teach or suggest that GPS data is also re-used together with the antenna baseline length to estimate the position or height of a target, as recited in Claims 1-22.

It is therefore respectfully submitted that Claims 1-22 patentably distinguish over Frankot '397.

As mentioned above, the remainder of the aforementioned applied references are believed to be even less pertinent than Frankot '397 with respect to the above-described exemplary feature of Claims 1-22.

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In view of the foregoing, the next Office Action should either point out, with the particularity required by 37 C.F.R. § 1.104(b)(2), where the above-described feature of Claims 1-22 is taught in any of the aforementioned applied references, or withdraw the corresponding prior art rejections of Claims 1-22.

Further and favorable consideration is respectfully requested.

Respectfully submitted,

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